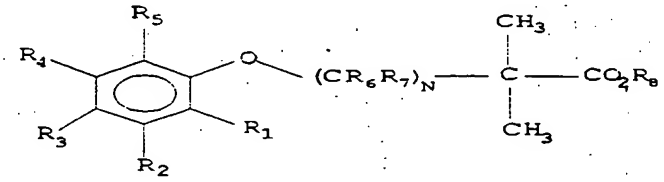
NOVEL ANTIMICROBIAL ACTIVITY OF GEMFIBROZIL

Abstract of the Disclosure

The present invention provides for a method for inhibiting growth of a bacterium which consists essentially of contacting the bacterium with a compound having the structure:



wherein each of R_1, R_2, R_3, R_4, R_5 and R_6 may be independently H, F, Cl, Br, I, -OH, $-OR_7$, -CN, $-COR_7$, $-SR_7$, $-N(R_7)_2$, $-NR_7COR_8$, $-NO_2$, $-(CH_2)_pOR_7$, $-(CH_2)_pX(R_7)_2$, $-(CH_2)_pXR_7COR_8$, a straight chain or branched, substituted or unsubstituted C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl, C_3-C_{10} cycloalkyl, C_3-C_{10} cycloalkenyl, thioalkyl, methylene thioalkyl, acyl, phenyl, substituted phenyl, or heteroaryl; wherein a linkage to the benzene ring may alternatively be -N-, -S-, -O- or -C-; wherein R_7 or R_8 may be independently H, F, Cl, Br, I, -OH, -CN, -COH, $-SH_2$, $-NH_2$, -NHCOH, $-(CH_2)_pOH$, $-(CH_2)_pX(CH_2)$, $-(CH_2)_pXCOH$, a straight chain or branched, substituted or unsubstituted C_1-C_{10} alkyl, thioalkyl, methylene thioalkyl, acyl, phenyl, substituted phenyl, or heteroaryl; wherein A may be $-N_2-$, -NH-, $-C=C=CH_2-$, $-C\equiv C-C_2HOH-$, $-C\equiv C-CH_2-$, $-CH_2-CH_2-O-$, $-CH_2-CH_2-CH_2-O-$, -S-, $-S(=O)_2-$, -C=O-, -C=O-O-, -NH-C=O-, -C=O-NH-; and wherein Q, p, N and X may independently be an integer from 1 to 10, or if Q is 1 A may be a (C_1-C_{10})-alkyl chain, (C_1-C_{10})-alkenyl chain or (C_1-C_{10})-alkynyl chain which can optionally be interrupted 1 to 3 times by -O- or -S- or -N-; or a pharmaceutically acceptable salt or ester thereof, which compound is present in a concentration effective to inhibit growth of the bacterium. A may be an (C_1-C_{10})-alkylene chain, (C_1-C_{10})-alkyl chain, or (C_1-C_{10})-alkynyl chain which is branched or unbranched, substituted or unsubstituted and can optionally be interrupted 1 to 3 times by -O- or -S- or -N-.